

CLAIMS:

1. A downhole swivel joint assembly comprising first and second components movable relative to one another in an axial direction along a longitudinal axis of the assembly, said components being movable relative to one another in said axial direction between an unactivated configuration, in which relative rotational movement between the first and second components is prevented, and an activated configuration, in which said rotational movement is permitted; wherein the assembly further comprises means for resisting movement of said components from the unactivated configuration to the activated configuration, said means comprising a resiliently deformable member arranged so as to be resiliently deformed when said components are moved from the unactivated configuration to the activated configuration.
2. A downhole swivel joint assembly according to Claim 1, wherein the activated and unactivated configurations are both mechanically stable configurations.
3. A downhole swivel joint assembly according to Claim 2, wherein the resisting means resists movement of the components from the activated configuration to the unactivated configuration.
4. A downhole swivel joint assembly according to Claim 3, wherein the resiliently deformable member is arranged to be resiliently deformed when the components are moved from the activated configuration to the unactivated configuration.
5. A downhole swivel joint assembly according to Claim 3 or Claim 4, wherein the force needed to move the components from the unactivated configuration to the activated configuration is greater than the force necessary to move the components from the activated configuration to the unactivated configuration.
6. A downhole swivel joint assembly as claimed in any preceding claim wherein said resiliently deformable member comprises a first cam surface and is retained in a fixed axial position relative to one of said first and second components, the other one of said components being provided with a second cam surface for co-operating with the first cam

surface and radially camming said member in to a resiliently deformed position when moving from the unactivated configuration.

7. A downhole swivel joint assembly as claimed in Claim 6, wherein said resiliently deformable member comprises a third cam surface, said other one of said components being provided with a fourth cam surface for co-operating with the third cam surface and radially camming said member in to a resiliently deformed position when moving from the activated configuration.

8. A downhole swivel joint assembly as claimed in any of the preceding claims, wherein said resiliently deformable member comprises a cylindrical wall having a slot extending through the full thickness of the wall and along the full length of the cylindrical wall.

9. A downhole swivel joint assembly as claimed in Claim 8, wherein the cylindrical wall is located about one of said first and second components.

10. A downhole swivel joint assembly as claimed in any of the preceding claims, wherein the first component is provided with means for connecting the assembly to further downhole equipment located, in use, above the assembly; and wherein the second component is provided with means for connecting the assembly to yet further downhole equipment located, in use, below the assembly.

11. A downhole swivel joint assembly as claimed in Claim 10, wherein the second component, or equipment connected thereto, is provided with an arm member extending outwardly for engaging, in use, with an uphole facing shoulder within a wellbore.

12. A downhole swivel joint assembly as claimed in any of the preceding claims, wherein a bearing comprising rolling elements is provided between the first and second components so as to assist in relative rotation between said components when said components are in the activated configuration.

13. A downhole swivel joint assembly as claimed in Claim 12, wherein the bearing comprises a plurality of races.

14. A downhole swivel joint assembly as claimed in Claim 12 or 13, wherein the bearing is located so as to be spaced from one of said components when said components are in the activated position.
15. A downhole swivel joint assembly as claimed in Claim 14, wherein said spaced component is provided with means for engaging, when said components are in the activated configuration, co-operating means provided on the bearing so as to prevent relative rotation between the engaged part of said component and bearing.
16. A wellbore clean-up assembly comprising a downhole swivel joint assembly as claimed in any of the preceding claims and further comprising a fluid circulating assembly, the fluid circulating assembly comprising a body incorporating a wall provided with at least one vent aperture extending therethrough; and a piston member slidably mounted in the body and slideable in the body in response to the application thereto of fluid pressure; wherein the piston member is slideable between a first position relative to the body, in which the or each vent aperture is closed, and a second position relative to the body, in which the or each vent aperture is open; the fluid circulating assembly further comprising constraining means adapted to prevent movement of the piston member from the first position to the second position; and overriding means for overriding the constraining means so as to permit movement of the piston to the second position.
17. A wellbore clean-up assembly as claimed in Claim 16, wherein the piston is biased to the first position by means of a spring.
18. A wellbore clean-up assembly as claimed in Claim 16 or 17, wherein the piston incorporates a wall provided with at least one opening extending therethrough such that, in the second position the openings of the piston and the body are in register, and in the first position the openings of the piston member and the body are out of register.
19. A wellbore clean-up assembly as claimed in any of Claims 16 to 18, wherein the constraining means comprises a guide pin and a guid slot for receiving the guide pin.

20. A wellbore clean-up assembly as claimed in Claim 19, wherein the guide slot extends in a direction having one component parallel to the direction of axial movement of the piston member.
21. A wellbore clean-up assembly as claimed in Claim 19 or 20, wherein the overriding means comprises an extension of the guide slot.
22. A wellbore clean-up assembly as claimed in any of Claims 19 to 21, wherein the guide pin is fixedly located relative to the body and the guide slot is formed in the exterior surface of the piston member or a second piston member slidably mounted in the body.
23. A method of cleaning a wellbore, the method comprising the steps of making up downhole apparatus comprising the wellbore clean-up assembly as claimed in any of Claims 8 to 16; running said assembly down a wellbore to be cleaned; landing the downhole swivel joint on a restriction within the wellbore; applying weight of the downhole apparatus to said restriction so as to move the downhole swivel joint from an unactivated configuration to an activated configuration; moving the piston member of the fluid circulating assembly from the first position to the second position; and ejecting fluid from the interior of the fluid circulating assembly through the or each vent aperture.
24. A method of cleaning a wellbore as claimed in Claim 23, further comprising the step of pumping cleaning fluid down the interior of the downhole apparatus and up the annulus between said apparatus and the wellbore prior to moving the piston member of the fluid circulating assembly.
25. A method of cleaning a wellbore as claimed in Claim 23 or 24, further comprising the step of making up said downhole apparatus so that the fluid circulating assembly is located uphole of the downhole swivel joint assembly; and rotating the fluid circulating assembly within the wellbore once the swivel joint assembly has been activated.